

CLAIMS

1. A method of steering an aircraft comprising a housing (1) and fan means, **characterized** by forming circulation using the fan means and directing the circulation along the housing (1) and by steering the aircraft by controlling the circulation and a stagnation point (SP) associated with the circulation.

2. A method as claimed in claim 1, **characterized** in that during take off the stagnation point (SP) is directed below the housing (1) in order to achieve lift.

3. A method as claimed in claim 2, **characterized** in that the stagnation point (SP) is directed from the front end of the housing (1) below the housing (1) in order to achieve thrust.

4. A method as claimed in any one of the preceding claims, **characterized** in that the stagnation point (SP) is directed to the rear end of the housing (1) in order to achieve thrust.

5. A method as claimed in claim 4, **characterized** in that the stagnation point (SP) is transferred from the front end of the housing (1) to the rear end of the housing (1) in order to achieve suction power in the front end of the housing (1) and thrust at the rear end of the housing (1).

6. A method as claimed in claim 1, **characterized** in that the stagnation point (SP) is directed from the front end of the housing (1) below the rear end of the housing (1) by directing the flow above the housing (1) through the tail of the housing (1) below the rear end of the housing (1) in order to generate suction power in front of the housing (1) and in order to achieve lift below the rear end of the housing (1).

7. A method as claimed in any one of the preceding claims, **characterized** in that air spoilers (6, 7) are utilized for directing the circulation.

8. A method as claimed in any one of the preceding claims, **characterized** in that the circulation is achieved by means of fan blades (2, 3) rotating about the housing.

9. A method as claimed in any one of claims 1 to 7, **characterized** in that the circulation is achieved by means of propeller fans (20).

10. A method as claimed in any one of the preceding claims, **characterized** in that the housing (1) produces lift during the level flight of the aircraft.

11. An aircraft comprising a housing (1) and fan means, **characterized** in that the fan means are such that they provide adjusting the blow direction and blowing force of the airflow so that air circulation is achieved and said circulation is directed along the housing and that the fan means are arranged to direct the circulation and to control the position of a stagnation point (SP) associated with the circulation.

12. An aircraft as claimed in claim 11, **characterized** in that air spoilers (6, 7) are provided at the fan means, whereby the circulation can be directed and the position of the stagnation point (SP) can be controlled by the fan means and the air spoilers (6, 7).

13. An aircraft as claimed in claim 12, **characterized** in that at least one of the air spoilers (6, 7) is annular.

14. An aircraft as claimed in claim 12 or 13, **characterized** in that the air spoilers (6, 7) are arranged to correspond to the form of the streamline or they are at a positive angle of attack in relation to the streamlines so as to produce lift.

15. An aircraft as claimed in any one of claims 11 to 14, **characterized** in that fan blades (2, 3) rotating about the housing (1) form the fan means.

16. An aircraft as claimed in claim 15, **characterized** in that the fan blades (2, 3) are arranged horizontally.

17. An aircraft as claimed in claim 15 or 16, **characterized** in that the fan blades (2, 3) are narrower at the root and at the tip than at the middle part thereof.

18. An aircraft as claimed in claim 15 or 16, **characterized** in that the fan blades (2, 3) are broader at the root than at the tip.

19. An aircraft as claimed in any one of claims 15 to 18, **characterized** in that electromagnetic actuators are connected to the mounting shafts of the fan blades (2, 3) to control the blade angle.

20. An aircraft as claimed in claim 19, **characterized** in that the electromagnetic actuator is arranged to operate regeneratively so that changes in blade angles caused for instance by turbulence allow the actuator to produce electric energy.

21. An aircraft as claimed in any one of claims 11 to 14, **characterized** in that propeller fans (20) form the fan means.

22. An aircraft as claimed in claim 21, **characterized** in that the propeller fans (20) are channel fans, whereby a protective ring functioning as an air spoiler is placed around the propeller.

23. An aircraft as claimed in any one of claims 11 to 22, **characterized** in that the upper part of the housing (1) is more convex than the lower part thereof, the housing thus producing lift during level flight.

24. An aircraft as claimed in any one of claims 11 to 23, **characterized** in that the upper surface of the housing (1) at the rear end of the aircraft is provided with suction slots (10) to direct the circulation through a space between an outer casing (11) and an intermediate casing (12) of the housing.

25. An aircraft as claimed in any one of claims 11 to 24, **characterized** in that a return air space (21) is formed at the rear end of the aircraft and the return air space is provided with adjustable flaps (22) to direct the circulation through the return air space (21), whereby air can either be sucked or blown through the flaps (22).